

Potentially Inappropriate Medications Used in Older Adults

New York State Department of Health, Patient Safety Center

Adapted from Archives of Internal Medicine, 163:2716-24 (2003),
based on Archives of Internal Medicine, 157:1531-36 (1997) ©1997. All rights reserved.

Drug Class	Generic (Brand) Name	Concern	Recommendation
Tricyclic Antidepressants	Amitriptyline (Elavil®) Doxepin (Sinequan®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • Changes in arrhythmic properties • ↑ Risk of falls • CAUTION WITH: Chronic Constipation and Dementia 	<ol style="list-style-type: none"> 1. Minimize doses whenever possible. 2. Consider SSRIs for depression. 3. Do not use in combination with other anticholinergics.
Antihistamines: 1st Generation	Diphenhydramine (Benadryl®) Clemastine (Tavist®) Chlorpheniramine (Chlor-Trimeton®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • CAUTION WITH: Dementia 	<ol style="list-style-type: none"> 1. Use 2nd generation (Claritin or Allegra). 2. Minimize duration of therapy. 3. Do not use with other anticholinergic medications.
Antispasmodics	Dicyclomine (Bentyl®) Hyoscyamine (Levsin®) Donnatal Clidinium Compound (Librax®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • CAUTION WITH: Dementia 	<ol style="list-style-type: none"> 1. Monitor creatinine clearance. 2. Minimize dosing and duration of use.
Benzodiazepines: Long-acting	Chlordiazepoxide (Librium®) Diazepam (Valium®) Chlorazepate (Tranxene®) Flurazepam (Dalmane®)	<ul style="list-style-type: none"> • Prolonged sedation, ↑ risk of falls due to ↓ metabolism and ↑ sensitivity to benzodiazepines 	<ol style="list-style-type: none"> 1. Use shorter-acting benzodiazepines: <ul style="list-style-type: none"> Lorazepam < 3 mg/day Oxazepam 60 mg/day Temazepam < 15 mg/day

Drug Class	Generic (Brand) Name	Concern	Recommendation
Antipsychotics: Typical	Thioridazine (Mellaril®) Haloperidol (Haldol®) Chlorpromazine (Thorazine®) Mesoridazine (Serentil®)	<ul style="list-style-type: none"> • ↑ Anticholinergic effects • CAUTION WITH: Dementia, Seizures, Parkinson Disease 	<ol style="list-style-type: none"> 1. Determine rationale for appropriate use. 2. Use atypical anti-psychotics if pharmacotherapy is deemed appropriate.
Pain Medications	Propoxyphene (Darvocet®) Meperidine (Demerol®) Ketorolac (Toradol®) Tramadol (Ultram)	<ul style="list-style-type: none"> • Lack of efficacy and confusion, ↑ dizziness due to ↓ renal function • ↑ Renal toxicity with long-term use • ↑ GI toxicity potential • CAUTION WITH: Dementia, Seizures 	<ol style="list-style-type: none"> 1. Do not use Toradol. 2. None should be considered the drug of choice for pain. 3. Consider alternate options for pain with caution based on patient history.
NSAIDs	Indomethacin (Indocin®) Oxaprozin (Daypro®) Etodolac (Lodine®)	<ul style="list-style-type: none"> • ↑ GI toxicity potential • ↑ risk of CHF exacerbation • CAUTION WITH: Clotting disorders, Anticoagulation Therapy, Heart Failure, aortic/Duodenal Ulcer 	<ol style="list-style-type: none"> 1. Use colchicine with renal dosing for gout. 2. Use in combination with acetaminophen to limit dose and duration of NSAIDs.
Cardiac Medications	Digoxin (Lanoxin®)	<ul style="list-style-type: none"> • Toxicity due to ↓ renal function 	<ol style="list-style-type: none"> 1. Monitor creatinine clearance. 2. Minimize dosing and duration of use.

Note: This chart is to be used as a guideline for treating elderly patients in order to prevent falls. It does not contain all medications that may affect fall risk in the elderly. Therefore, providers are cautioned to use their clinical judgment.